

Methicillin Resistant Staphylococcus aureus (MRSA)

What is MRSA?

MRSA stands for methicillin resistant *Staphylococcus aureus*. It is a bacterium that has developed a resistance to most antibiotics commonly used for staphylococcus infections. These drugs include methicillin, oxacillin, nafcillin, cephalosporins, imipenem, and other beta-lactams.

What is the Reservoir for MRSA?

MRSA can affect people in two different ways--colonization or infection. When a person carries the flora on the skin or in the nose without showing signs or symptoms of infection, the person is said to be **colonized**. If a person has signs of infection that are caused by MRSA (such as abscesses, wound infections, pneumonia, respiratory infections, blood, stool or urinary tract infections), the person is said to be **infected**.

How does MRSA spread from person to person?

MRSA most often spreads from person to person by **direct** contact. For example, in medical settings MRSA is most commonly spread from patient to patient by health care workers' hands.

How can you stop the spread of MRSA?

The **single most effective way to prevent the spread of infection is by proper handwashing**. Handwashing, by lathering up with soap for at least 20 seconds and rinsing with warm running water, is the key to preventing the spread. Hands should be washed both before and after contact with a patient. Other measures include following Body Substance Precautions by using protective equipment to avoid contact with another person's body fluids. Gloves should be worn for all dressing changes. Additionally, protective equipment should be disposed of after use, and hands must be washed after removing the protective equipment. Separate clean and dirty linen. Follow a schedule for daily environmental cleaning. Observe the isolation procedures of your facility.

Is MRSA more of a concern than other infections?

The answer is both yes and no. MRSA is not a "super bug" and is no more virulent than *Staphylococcus aureus*. However, all infections are of concern to health care workers and patients. MRSA is of particular importance because infections caused by MRSA are very difficult to treat. Typically, MRSA infections are treated intravenously with a drug called vancomycin. The side effects of this drug may be quite severe, particularly in elderly or immunodeficient patients. Additionally, patients with invasive devices such as catheters, nasogastric or gastrostomic tubes, or with intravenous lines are much more likely to acquire infections, including MRSA.

What can be done to prevent the spread of MRSA?

1. Educate the patient if possible about his/her condition.
2. Follow Body Substance Precautions. Keep draining lesions covered.
3. If possible, use staffing cohorts to take care of patients with MRSA. If private rooms are not available, cohort patients with MRSA. Ensure that a patient with MRSA infection does not share a room with a patient who is predisposed to infection, as described above.

Where can I get more information?

- Your nursing director
- Your local health department listed in the telephone directory
- The Utah Department of Health, Bureau of Epidemiology, (801) 538-6191

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